

Application Number: 10/597,899
Amendment Dated: September 15, 2010
Reply to Office Action: March 15, 2010

LISTING OF THE CLAIMS

Claims 1 through 12, cancelled.

13. (currently amended) A method for attaching a fibrous coating to a substrate comprising the step of:

pushing at least a portion of the fibrous coating through at least one hole in the substrate,

wherein the fibrous coating includes fibers formed from one or more polyolefins, polyethylene, polypropylene, linear poly(ethylenimine), cellulose acetate, grafted cellulosics, poly(L-lactic acid), poly(caprolactone), poly(ethyleneoxide), poly(hydroxyethylmethacrylate), poly (glycolic acid) or polyvinylpyrrolidone.

14. (original) The method of claim 13 for attaching a fibrous coating to a substrate further comprising the steps of:

adding at least one nanofiber to a fluid; and

passing the fluid through at least one hole in the substrate so that at least a portion of a nanofiber also passes or pushes through the at least one hole in the substrate.

15. (original) The method of claim 13 for attaching a fibrous coating to a substrate, wherein the pushing step further comprises:

using a fluid jet to push at least a portion of the fibrous coating through the at least one hole in the substrate.

16. (original) The method of claim 13, wherein the fibrous coating includes polypropylene fibers.

17. (original) The method of claim 13, wherein the fibrous coating includes polypropylene nanofibers.

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18. (original) The method of claim 13, wherein the fibrous coating is formed by electrospinning at least one fiber onto a surface of the substrate.

19. (withdrawn) The method of claim 13, wherein the fibrous coating is formed using a nanofibers by gas jet method to manufacture at least one fiber directly onto the substrate.

20. (original) The method of claim 13, wherein fibrous coating is formed using an electrospinnable solution having a temperature sufficient to dissolve the polymer solution.

21. (original) The method of claim 20, wherein the polymer solution comprises polypropylene, polyolefins, or polyolefin copolymers.

22. (original) A method for attaching a fibrous coating to a substrate comprising the steps:

providing a substrate;

coating a first side of the substrate with a fibrous coating; and

forcing at least one fiber through an opening in the substrate,

wherein the fibrous coating includes fibers formed from one or more polyolefins, polyethylene, polypropylene, linear poly(ethylenimine), cellulose acetate, grafted cellulosics, poly(L-lactic acid), poly(caprolactone), poly(ethyleneoxide), poly(hydroxyethylmethacrylate), poly (glycolic acid) or polyvinylpyrrolidone.

23. (original) The method of claim 22, wherein the step of forcing at least one fiber through an opening in a substrate is performed by:

adding at least one fiber to a fluid to thereby form a fiber-fluid solution; and

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passing the fiber-fluid solution through at least one hole in an device wall so that the fiber is threaded by the fluid into the at least one hole in the device wall.

24. (original) The method of claim 22, wherein the device is a stent or substrate and the substrate is a stent wall or a surgical-mesh wall.

25. (original) The method of claim 22 for attaching a fibrous coating to a substrate further comprising the step:

pulling at least a portion of the fibrous coating through at least one hole in the substrate.

26. (original) The method of claim 22, wherein the step of pulling at least a portion of the fibrous coating through the at least one hole in the substrate is performed by pulling a substantially needle-like object through at least one hole in the substrate, wherein a portion of the fibrous coating is pulled through the at least one hole by the needle-like object.

27. (original) The method of claim 22, wherein the step of pulling at least a portion of the fibrous coating through the at least one hole in the substrate is achieved by performing the additional steps:

inserting a portion of at least one substantially needle-like object through the at least one hole;

attaching at least one nanofiber to the substantially needle-like object; and

withdrawning the substantially needle-like object from the at least one hole so that the at least one nanofiber is pulled through the at least one hole.

28. (original) The method of claim 22 for attaching a fibrous coating to a substrate further comprising the steps:

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applying a positively-charged fibrous coating to a first side of the substrate;
and

applying a negatively-charged fibrous coating to a second side of the
substrate.

29. (original) The method of claim 22, further including coating a second
side of the substrate with at least a second fiber; wherein the fibrous coating or the at least
a second fiber is contact adhesive, and wherein the fibrous coating and the at least a
second fiber contact each other so that at least a portion of the fibrous coating and the at
least a second fiber forms an adherent joint.

30. (original) The method of claim 22 for attaching a fibrous coating to a
substrate further comprising the step:

heat treating a fibrous coating, wherein the heat treatment causes at least
one nanofiber to melt and form an adherent joint with at least, another nanofiber, or the
substrate.

31. (original) The method of claim 30, wherein the heat treating step further
comprises using a laser, a heating element, or a combination thereof.

Claims 32 through 34, cancelled.